ABSTRACT

Improved components for a molten metal pump include a coupling for connecting a rotor shaft to a motor shaft, a rotor shaft and a rotor. The rotor shaft has a first end and a second end wherein the first end optionally has a vertical keyway formed in the outer surface of the shaft. The second end optionally has flat, shallow threads. The coupling can be one-piece or multi-piece, includes a cavity for receiving the first end of the rotor shaft and, if the first end of the rotor shaft has a keyway, the coupling includes a projection in the cavity for being received at least partially in the keyway. The rotor includes a connective portion that connects to the second end of the rotor shaft. If the second end of the rotor shaft includes flat, shallow threads, the connective portion is essentially a bore having flat, shallow threads configured to receive the second end of the rotor shaft. Optionally, the first end of the rotor shaft may have flat, shallow threads in which case the coupling would have a cavity that receives the first end of the rotor shaft, wherein the cavity has flat, shallow threads.

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